FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) RENEWAL OFFICE OF AIR QUALITY

Floyd Crim & Sons, Inc. 3713 North 775 East Manilla, Indiana 46150

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: F145-14503-00010				
Issued by: Original signed by Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: June 19, 2002 Expiration Date: June 19, 2007			

Floyd Crim & Sons, Inc. Manilla, Indiana 2 of 38 145-14503-00010

Permit Reviewer: ERG/AR

TABLE OF CONTENTS

SECTION A	SOURCE SUMMARY
A.1	General Information [326 IAC 2-8-3(b)]
A.2	Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]
A.3	Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]
A.4	FESOP Applicability [326 IAC 2-8-2]
A.5	Prior Permits Superseded [326 IAC 2-1.1-9.5]
SECTION B	GENERAL CONDITIONS
B.1	Permit No Defense [IC 13]
B.2	Definitions [326 IAC 2-8-1]
B.3	Permit Term [326 IAC 2-8-4(2)]
B.4	Enforceability [326 IAC 2-8-6]
B.5	Termination of Right to Operate [326 IAC 2-8-9][326 IAC 2-8-3 (h)]
B.6	Severability [326 IAC 2-8-4(4)]
B.7	Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]
B.8	Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)] [326 IAC 2-8-5(a)(4)]
B.9	Compliance Order Issuance [326 IAC 2-8-5(b)]
B.10	Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]
B.11	Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]
B.12	Annual Compliance Certification [326 IAC 2-8-5(a)(1)]
B.13	Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)][326 IAC 2-8-5(a)(1)]
B.14	Emergency Provisions [326 IAC 2-8-12]
B.15	Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]
B.16	Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]
B.17	Permit Renewal [326 IAC 2-8-3(h)]
B.17 B.18	Permit Amendment or Revision [326 IAC 2-8-10][326 IAC 2-8-11.1]
B.19	Operational Flexibility [326 IAC 2-8-15]
B.20	Permit Revision Requirement [326 IAC 2-8-11.1]
B.21	Inspection and Entry [326 IAC 2-8-5(a)(2)] [113-14-2-2]
B.22	Transfer of Ownership or Operation [326 IAC 2-8-10]
B.23	Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16]
SECTION C	SOURCE OPERATION CONDITIONS
	ion Limitations and Standards [326 IAC 2-8-4(1)]
C.1	Overall Source Limit [326 IAC 2-8]
C.2	Opacity [326 IAC 5-1]
C.3	Open Burning [326 IAC 4-1][IC 13-17-9]
C.4	Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]
C.5	Fugitive Dust Emissions [326 IAC 6-4]
C.6	Operation of Equipment [326 IAC 2-8-5(a)(4)]
C.7	Stack Height [326 IAC 1-7]
C.8	Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

Testing Requirements [326 IAC 2-8-4(3)] C.9 Performance Testing [326 IAC 3-6]

Floyd Crim & Sons, Inc. 3 of 38
Manilla, Indiana 145-14503-00010

Permit Reviewer: ERG/AR

TABLE OF CONTENTS (Continued)

Compliance Requirements [326 IAC 2-1.1-11]

C.10 Compliance Requirements [326 IAC 2-1.1-11]

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

- C.11 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)] [326 IAC 2-7-6(1)]
- C.12 Maintenance of Emission Monitoring Equipment [326 IAC 2-8-4(3)(A)(iii)]
- C.13 Monitoring Methods [326 IAC 3][40 CFR 60][40 CFR 63]
- C.14 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)] [326 IAC 2-8-5(1)]

Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

- C.15 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68.215]
- C.16 Compliance Response Plan Preparation, Implementation, Records, and Reports [326 IAC 2-8-4] [326 IAC 2-8-5]
- C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4] [326 IAC 2-8-5]

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

- C.18 Emission Statement [326 IAC 2-6] [326 IAC 2-8-4(3)]
- C.19 General Record Keeping Requirements [326 IAC 2-8-4(3)][326 IAC 2-8-5]
- C.20 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]
- C.21 Compliance with 40 CFR 82 and 326 IAC 22-1

SECTION D.1 FACILITY OPERATION CONDITIONS

Emission Limitations and Standards [326 IAC 2-8-4(1)]

- D.1.1 Particulate Matter Less Than Ten Microns (PM-10) [326 IAC 2-8-4] [326 IAC 2-2][40 CFR 52.21]
- D.1.2 Particulate Matter (PM) [326 IAC 12] [40 CFR 60, subpart I] [326 IAC 2-2][40 CFR 52.21]
- D.1.3 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A]
- D.1.4 Sulfur Dioxide (SO₂) Emission Limitations [326 IAC 7-1.1-1] [326 IAC 7-1.1-2]
- D.1.5 Miscellaneous Operations: Asphalt Paving [326 IAC 8-5-2]
- D.1.6 Volatile Organic Compounds (VOC) [326 IAC 2-8-4]
- D.1.7 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

Compliance Determination Requirements

- D.1.8 Sulfur Dioxide Emissions and Sulfur Content
- D.1.9 Testing Requirements [326 IAC 2-8-4(3)]
- D.1.10 Particulate Matter (PM)

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

- D.1.11 Visible Emissions Notations
- D.1.12 Monitoring of Scrubber Operational Parameters

Floyd Crim & Sons, Inc. 4 of 38 Manilla, Indiana 145-14503-00010

Permit Reviewer: ERG/AR

TABLE OF CONTENTS (Continued)

D.1.13 Scrubber Inspections

Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.1.14 Record Keeping Requirements

D.1.15 Reporting Requirements

Certification Form
Single Liquid Binder Solvent Quarterly Report
Multiple Liquid Binder Solvent Quarterly Report
Emergency Occurrence Form
Quarterly Deviation and Compliance Monitoring Report Form

Floyd Crim & Sons, Inc. 5 of 38
Manilla. Indiana 145-14503-00010

Permit Reviewer: ERG/AR

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a stationary hot drum-mix asphalt plant.

Authorized individual: Steve Crim

Source Address: 3713 North 775 East, Manilla, Indiana 46150 Mailing Address: 3713 North 775 East, Manilla, Indiana 46150

SIC Code: 2951 Source Location Status: Shelby

County Status: Attainment for all criteria pollutants

Source Status: Federally Enforceable State Operating Permit (FESOP)

Minor Source, under PSD

Minor Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

One (1) aggregate dryer/mixer with a maximum capacity of 110 tons per hour, having a burner with a maximum heat input rate of 37 million British thermal units per hour, exhausting through a venturi scrubber at stack C-3. The burner is fired by #2 distillate fuel oil. This unit was constructed in March 1994.

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Space heaters, process heaters, heat treat furnaces, or boilers using the following fuel: Fuel oil-fired combustion sources with heat input equal to or less than two million (2,000,000) Btu per hour and firing fuel containing less than five-tenths (0.5) percent sulfur by weight.
 - (1) One (1) hot oil heater with a maximum heat input rate of 1.0 million British thermal units per hour, fired only by #2 distillate fuel oil containing less than 0.49 percent sulfur by weight. This unit was constructed in 1985.
- (b) Paved and unpaved roads and parking lots with public access.
 - (1) Paved roads.
- (c) Emission units with PM and PM10 emissions less than five (5) tons per year, SO₂, NOx, and VOC emissions less than ten (10) tons per year, CO emissions less than twenty-five (25) tons per year, lead emissions less than two-tenths (0.2) tons per year, single HAP emissions less than one (1) ton per year, and combination of HAPs emissions less than two and a half (2.5) tons per year:

Floyd Crim & Sons, Inc. 6 of 38
Manilla, Indiana 145-14503-00010

Permit Reviewer: ERG/AR

- (1) One (1) material conveying and handling operation.
- (2) Two (2) asphalt storage tanks with capacities equal to 10,000 gallons.
- (3) One (1) #2 fuel oil storage tank with a capacity of 10,000 gallons.
- (4) Sand and limestone stockpiles with a total capacity of 1,000 tons.

A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) to renew a Federally Enforceable State Operating Permit (FESOP).

A.5 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either
 - (1) incorporated as originally stated,
 - (2) revised, or
 - (3) deleted

by this permit.

(b) All previous registrations and permits are superseded by this permit.

Floyd Crim & Sons, Inc. 7 of 38
Manilla. Indiana 145-14503-00010

Permit Reviewer: ERG/AR

SECTION B GENERAL CONDITIONS

B.1 Permit No Defense [IC 13]

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

B.2 Definitions [326 IAC 2-8-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2, and 326 IAC 2-7) shall prevail.

B.3 Permit Term [326 IAC 2-8-4(2)]

This permit is issued for a fixed term of five (5) years from the original date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

B.4 Enforceability [326 IAC 2-8-6]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.5 Termination of Right to Operate [326 IAC 2-8-9] [326 IAC 2-8-3(h)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

B.6 Severability [326 IAC 2-8-4(4)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.7 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

B.8 Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)] [326 IAC 2-8-5(a)(4)]

(a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The Permittee shall furnish to IDEM, OAQ within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "authorized"

Permit Reviewer: ERG/AR

individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the U. S. EPA along with a claim of confidentiality.[326 IAC 2-8-4(5)(E)]

(c) The Permittee may include a claim of confidentiality in accordance with 326 IAC 17. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.9 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

B.10 Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for:
 - (1) Enforcement action;
 - (2) Permit termination, revocation and reissuance, or modification; and
 - (3) Denial of a permit renewal application.
- (b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (c) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in condition B, Emergency Provisions.

B.11 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an authorized individual of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) An authorized individual is defined at 326 IAC 2-1.1-1(1).

B.12 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. All certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality

Floyd Crim & Sons, Inc. 9 of 38
Manilla. Indiana 145-14503-00010

Permit Reviewer: ERG/AR

100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
 - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and
 - (5) Such other facts as specified in Sections D of this permit, IDEM, OAQ may require to determine the compliance status of the source.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.13 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall-maintain and implement Preventive Maintenance Plans (PMPs), including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The

10 of 38 145-14503-00010

Floyd Crim & Sons, Inc. Manilla, Indiana

Permit Reviewer: ERG/AR

records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

B.14 Emergency Provisions [326 IAC 2-8-12]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-8-12.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describes the following:
 - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
 - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone No.: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section) or

Telephone No.: 317-233-5674 (ask for Compliance Section)

Facsimile No.: 317-233-5967

Failure to notify IDEM, OAQ by telephone or facsimile within four (4) daytime business hours after the beginning of the emergency, or after the emergency is discovered or reasonably should have been discovered, shall constitute a violation of 326 IAC 2-8 and any other applicable rules. [326 IAC 2-8-12(f)]

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
 - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
 - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
 - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
 - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provision), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Floyd Crim & Sons, Inc. 12 of 38
Manilla, Indiana 145-14503-00010

Permit Reviewer: ERG/AR

Indianapolis, Indiana 46206-6015

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.
- (c) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a FESOP modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:
 - (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]
- (c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

B.17 Permit Renewal [326 IAC 2-8-3(h)]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, IN 46206-6015

- (b) Timely Submittal of Permit Renewal [326 IAC 2-8-3]
 - (1) A timely renewal application is one that is:
 - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
 - (2) If IDEM, OAQ upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.
- (c) Right to Operate After Application for Renewal [326 IAC 2-8-9]

 If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ any additional information identified as needed to process the application.

B.18 Permit Amendment or Revision [326 IAC 2-8-10] [326 IAC 2-8-11.1]

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

Any such application should be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement the administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

Floyd Crim & Sons, Inc. 14 of 38
Manilla, Indiana 145-14503-00010

Permit Reviewer: ERG/AR

(a) The Permittee may make any change or changes at this source that are described in 326 IAC 2-8-15(b) through (d), without prior permit revision, if each of the following conditions is met:

- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
- (2) Any approval required by 326 IAC 2-8-11.1 has been obtained;
- (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
- (4) The Permittee notifies the:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-8-15(b) through (d) and makes such records available, upon reasonable request, to public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ in the notices specified in 326 IAC 2-8-15(b), (c)(1), and (d).

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-8-15(a) and the following additional conditions:
 - (1) A brief description of the change within the source;
 - (2) The date on which the change will occur;
 - (3) Any change in emissions; and
 - (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

Floyd Crim & Sons, Inc. 15 of 38
Manilla. Indiana 145-14503-00010

Permit Reviewer: ERG/AR

(c) Emission Trades [326 IAC 2-8-15(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).

(d) Alternative Operating Scenarios [326 IAC 2-8-15(d)]

The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ or U.S. EPA is required.

B.20 Permit Revision Requirement [326 IAC 2-8-11.1]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-8-11.1.

B.21 Inspection and Entry [326 IAC 2-8-5(a)(2)] [IC 13-14-2-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ U.S. EPA, or an authorized representative to perform the following:

- Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.22 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

- (a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

16 of 38 145-14503-00010

Floyd Crim & Sons, Inc. Manilla, Indiana Permit Reviewer: ERG/AR

The application which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-11(b)(3)]

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16]

- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action, or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAQ, Technical Support and Modeling Section), to determine the appropriate permit fee.

Permit Reviewer: ERG/AR

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

C.1 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

- (a) Pursuant to 326 IAC 2-8:
 - (1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period. This limitation shall also satisfy the requirements of 326 IAC 2-3 (Emission Offset);
 - (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
 - (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.
- (b) Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), potential to emit particulate matter (PM) from the entire source shall be limited to less than two hundred fifty (250) tons per twelve (12) consecutive month period.
- (c) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided the source's potential to emit does not exceed the above specified limits.
- (d) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

Floyd Crim & Sons, Inc.

18 of 38

Manilla. Indiana

145-14503-00010

Permit Reviewer: ERG/AR

C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and in 326 IAC 9-1-2.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

C.6 Operation of Equipment [326 IAC 2-8-5(a)(4)]

Except as otherwise provided by statute, rule or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.7 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management Asbestos Section, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (e) Procedures for Asbestos Emission Control
 The Permittee shall comply with the applicable emission control procedures in 326 IAC 1410-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are
 applicable for any removal or disturbance of RACM greater than three (3) linear feet on
 pipes or three (3) square feet on any other facility components or a total of at least 0.75
 cubic feet on all facility components.
- (f) Indiana Accredited Asbestos Inspector
 The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator,
 prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to
 thoroughly inspect the affected portion of the facility for the presence of asbestos. The
 requirement that the inspector be accredited is federally enforceable.

Testing Requirements [326 IAC 2-8-4(3)]

C.9 Performance Testing [326 IAC 3-6]

(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

20 of 38 145-14503-00010

Floyd Crim & Sons, Inc. Manilla, Indiana Permit Reviewer: ERG/AR

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.11 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins

C.12 Maintenance of Emission Monitoring Equipment [326 IAC 2-8-4(3)(A)(iii)]

- (a) In the event that a breakdown of the emission monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no often less than once an hour until such time as the continuous monitor is back in operation.
- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.13 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing performed required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63 or other approved methods as specified in this permit.

21 of 38 145-14503-00010

Floyd Crim & Sons, Inc. Manilla, Indiana Permit Reviewer: ERG/AR

C.14 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)] [326 IAC 2-8-5(1)]

- (a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.
- (b) Whenever a condition in this permit requires the measurement of a flow rate, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.
- (c) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.15 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:

- (a) A compliance schedule for meeting the requirements of 40 CFR 68; or
- (b) As a part of the annual compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and

All documents submitted pursuant to this condition shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

C.16 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-8-4] [326 IAC 2-8-5]

- (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:
 - (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.
 - (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the

Permittee shall amend its Compliance Response Plan to include such response steps taken.

Floyd Crim & Sons, Inc. 22 of 38
Manilla. Indiana 145-14503-00010

Permit Reviewer: ERG/AR

(b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:

- (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or
- (2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.
- (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.
- (4) Failure to take reasonable response steps shall constitute a violation of the permit.
- (c) The Permittee is not required to take any further response steps for any of the following reasons:
 - (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied.
 - (3) An automatic measurement was taken when the process was not operating.
 - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.
- (e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.
- C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4] [326 IAC 2-8-5]

- (a) When the results of a stack test performed in conformance with Section C Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

C.18 Emission Statement [326 IAC 2-6] [326 IAC 2-8-4(3)]

(a) The Permittee shall submit an emission statement certified pursuant to the requirements of 326 IAC 2-6. This statement must be received by **April 15 or July 1** and must comply with the minimum requirements specified in 326 IAC 2-6-4. The statement must be submitted to:

Indiana Department of Environmental Management Technical Support and Modeling Section, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

The emission statement does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

C.19 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

- (a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

24 of 38 145-14503-00010

Floyd Crim & Sons, Inc. Manilla, Indiana Permit Reviewer: ERG/AR

- (a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC2-1.1-1(1).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (d) Unless otherwise specified in this permit, any quarterly report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The reports do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) Reporting periods are based on calendar years.

C.21 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to 40 CFR 82.156
- (b) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

Floyd Crim & Sons, Inc. 25 of 38
Manilla, Indiana 145-14503-00010

Permit Reviewer: ERG/AR

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

One (1) aggregate dryer/mixer with a maximum capacity of 110 tons per hour, having a burner with a maximum heat input rate of 37 million British thermal units per hour, exhausting through a venturi scrubber at stack C-3. The burner is fired by #2 distillate fuel oil. This unit was constructed in March 1994.

Insignificant Activities:

- (a) Space heaters, process heaters, heat treat furnaces, or boilers using the following fuel: Fuel oil-fired combustion sources with heat input equal to or less than two million (2,000,000) Btu per hour and firing fuel containing less than five-tenths (0.5) percent sulfur by weight.
 - (1) One (1) hot oil heater with a maximum heat input rate of 1.0 million British thermal units per hour, fired only by #2 distillate fuel oil containing less than 0.49 percent sulfur by weight. This unit was constructed in 1985.
- (b) Emission units with PM and PM10 emissions less than five (5) tons per year, SO₂, NOx, and VOC emissions less than ten (10) tons per year, CO emissions less than twenty-five (25) tons per year, lead emissions less than two-tenths (0.2) tons per year, single HAP emissions less than one (1) ton per year, and combination of HAPs emissions less than two and a half (2.5) tons per year:
 - (1) One (1) material conveying and handling operation.
 - (2) Two (2) asphalt storage tanks with capacities equal to 10,000 gallons.
 - (3) One (1) #2 fuel oil storage tank with a capacity of 10,000 gallons.
 - (4) Sand and limestone stockpiles with a total capacity of 1,000 tons.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.1.1 Particulate Matter Less Than Ten Microns (PM-10) [326 IAC 2-8-4] [326 IAC 2-2][40 CFR 52.21]

Pursuant to 326 IAC 2-8-4, the emissions of PM-10 from the aggregate dryer/mixer shall be limited to 0.048 pounds of PM-10 per ton of asphalt produced. This is equivalent to PM-10 emissions of less than 23.1 tons per year. Use of the scrubber will ensure compliance with this limit. The PM-10 emissions for the whole source are therefore limited to less than 100 tons per year. Compliance with this limit makes 326 IAC 2-7 (Part 70 Permit Program), 326 IAC 2-2 (PSD) and 40 CFR 52.21 not applicable and ensures compliance with New Source Performance Standards, 326 IAC 12 (40 CFR 60.90 to 60 .93, Subpart I).

D.1.2 Particulate Matter (PM) [326 IAC 12] [40 CFR 60, subpart I][326 IAC 2-2][40 CFR 52.21] Pursuant to the New Source Performance Standards, 326 IAC 12 (40 CFR 60.90 to 60.93, Subpart I):

Floyd Crim & Sons, Inc. 26 of 38
Manilla. Indiana 145-14503-00010

Permit Reviewer: ERG/AR

(a) particulate matter emissions from the asphalt plant shall not exceed 0.04 grains per dry standard cubic foot (gr/dscf), and

(b) the visible emissions from the plant shall not exceed 20 percent opacity.

This emission limitation is equivalent to 5.3 pounds per hour based on an exhaust rate of 15,383 dscfm and an exhaust temperature of 319 degrees Fahrenheit. Compliance with this limit ensures that 326 IAC 2-2 (PSD) and 40 CFR 52.21 are not applicable.

D.1.3 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR Part 60, Subpart A]

The provisions of 40 CFR Part 60, Subpart A (General Provisions), which are incorporated by reference in 326 IAC 12-1, apply to the asphalt plant except when otherwise specified in 40 CFR Part 60, Subpart I.

D.1.4 Sulfur Dioxide (SO₂) Emission Limitations [326 IAC 7-1.1-1] [326 IAC 7-1.1-2]

Pursuant to 326 IAC 7-1.1-2 (Sulfur Dioxide Emission Limitations), the SO₂ emissions from the combustion of the #2 fuel oil shall not exceed five tenths (0.5) pounds per million Btu heat input.

Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a thirty (30) month rolling weighted average.

D.1.5 Miscellaneous Operations: Asphalt Paving [326 IAC 8-5-2]

Pursuant to 326 IAC 8-5-2, no person shall cause or allow the use of cutback asphalt or asphalt emulsion containing more than 7 percent oil distillate by volume of emulsion of any paving application except:

- (a) Penetrating prime coating;
- (b) Stockpile storage; and
- (c) Application during the months of November, December, January, February, and March.

D.1.6 Volatile Organic Compounds (VOC) [326 IAC 2-8-4]

- (a) Pursuant to 326 IAC 2-8-4, the VOC solvent used as diluent in the liquid binder used in cold mix asphalt production from the plant shall be limited such that no more than 98.8 tons of VOC emissions emitted per twelve (12) consecutive months. This shall be achieved by limiting the total VOC solvent of any one selected binder to not exceed the stated limit in (c) for that binder during the last twelve (12) months. When more than one binder is used, the formula in (c)(6) must be applied so that the total VOC emitted does not exceed 98.8 tons per twelve (12) consecutive month period.
- (b) Liquid binders used in the production of cold mix asphalt shall be defined as follows:
 - (1) <u>Cut back asphalt rapid cure</u>, containing a maximum of 25.3% of the liquid binder by weight of VOC solvent and 95% by weight of VOC solvent evaporating.
 - (2) <u>Cut back asphalt medium cure</u>, containing a maximum of 28.6% of the liquid binder by weight of VOC solvent and 70% by weight of VOC solvent evaporating.
 - (3) <u>Cut back asphalt slow cure</u>, containing a maximum of 20% of the liquid binder by weight of VOC solvent and 25% by weight of VOC solvent evaporating.

- (4) Emulsified asphalt with solvent, containing a maximum of 15% of liquid binder by weight of VOC solvent and 46.4% by weight of the VOC solvent in the liquid blend evaporating. The percent oil distillate in emulsified asphalt with solvent liquid, as determined by ASTM, must be 7% or less of the total emulsion by volume
- (5) Other asphalt with solvent binder, containing a maximum 25.9% of the liquid binder of VOC solvent and 2.5% by weight of the VOC solvent evaporating
- (c) The liquid binder used in cold mix asphalt production shall be limited as follows:
 - (1) Cutback asphalt rapid cure liquid binder usage shall not exceed 98.8 tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis.
 - (2) Cutback asphalt medium cure liquid binder usage shall not exceed 134.4 tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis.
 - (3) Cutback asphalt slow cure liquid binder usage shall not exceed 375.4 tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis.
 - (4) Emulsified asphalt with solvent liquid binder usage shall not exceed 201.6 tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis.
 - (5) Other asphalt with solvent liquid binder shall not exceed 3,754.4 tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis.
 - (6) The VOC solvent allotments in subpart (c)(1) through (c)(5) of this condition shall be adjusted when more than one type of binder is used per twelve (12) month consecutive period rolled on a monthly basis. In order to determine the tons of VOC emitted per each type of binder, use the following formula and divide the tons of VOC solvent used for each type of binder by the corresponding adjustment ratio listed in the table that follows.

<u>Tons of solvent contained in binder</u> = tons of VOC emitted Adjustment ratio

Type of Binder	Tons VOC Solvent	Adjustment Ratio	Tons VOC Emitted
Cutback Asphalt Rapid Cure		1	
Cutback Asphalt Medium Cure		1.36	
Cutback Asphalt Slow Cure		3.8	
Emulsified Asphalt		2.04	
Other Asphalt		38	

The equivalent total tons of VOC of the combined liquid binders shall be less than 98.8 tons per twelve (12) consecutive month period rolled on a monthly basis. Compliance with this limit will ensure that 326 IAC 2-7 does not apply.

Floyd Crim & Sons, Inc. 28 of 38
Manilla. Indiana 145-14503-00010

Permit Reviewer: ERG/AR

D.1.7 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Determination Requirements

D.1.8 Sulfur Dioxide Emissions and Sulfur Content

Compliance shall be determined utilizing one of the following options.

- (a) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed five-tenths (0.5) pounds per million Btu heat input by:
 - Providing vendor analysis of fuel delivered, if accompanied by a vendor certification;
 or
 - (2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
 - (A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
 - (B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.
- (b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the 37 MMBtu per hour burner, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

A determination of noncompliance pursuant to any of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

D.1.9 Testing Requirements [326 IAC 2-8-4(3)]

The Permittee shall perform PM-10 testing utilizing methods as approved by the Commissioner to document compliance with Condition D.1.2 and D.1.3. This test shall be repeated at least once every five years from the date of the last valid compliance demonstration. PM-10 includes filterable and condensible PM

D.1.10 Particulate Matter (PM)

In order to comply with D.1.1 and D.1.2 the scrubber for PM and PM-10 control shall be in operation and control emissions from the aggregate dryer/mixer at all times that the aggregate dryer/mixer are in operation.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.1.11 Visible Emissions Notations

- (a) Visible emission notations of the aggregate dryer/mixer stack exhaust shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

Floyd Crim & Sons, Inc. 29 of 38
Manilla. Indiana 145-14503-00010

Permit Reviewer: ERG/AR

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C Compliance Response Plan Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.1.12 Monitoring of Scrubber Operational Parameters

The Permittee shall record the scrubber flow rate and pressure drop across the scrubber used in conjunction with the aggregate dryer/mixer, at least once per shift when the aggregate dryer/mixer is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the scrubber flow rate and pressure drop across the scrubber shall be maintained within the range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.1.13 Scrubber Inspections

An inspection shall be performed each calendar quarter of all scrubbers controlling the aggregate dryer/mixer when venting to the atmosphere. A scrubber inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors.

Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.1.14 Record Keeping Requirements

- (a) To document compliance with Condition D.1.6 Volatile Organic Compounds, VOC records shall document VOC usage as follows:
 - (1) Amount and type of liquid binder used in the production of cold mix asphalt each day.
 - (2) Type and VOC, solvent content by weight of the liquid binder used in the production of cold mix asphalt each day.
 - (3) Amount of VOC, solvent used in the production of cold mix asphalt each day.

Records may include: delivery tickets, manufacturer's data, material safety data sheets (MSDS), and other documents necessary to verify the type and amount used. Test

results of ASTM tests for asphalt cutback and asphalt emulsion may be used to document volatilization.

Floyd Crim & Sons, Inc. 30 of 38
Manilla. Indiana 145-14503-00010

Permit Reviewer: ERG/AR

(b) To document compliance with Condition D.1.4 and D.1.8, the Permittee shall maintain records in accordance with (1) through (6) below.

- (1) Calendar dates covered in the compliance determination period;
- (2) Actual fuel oil usage since last compliance determination period and equivalent sulfur dioxide emissions;
- (3) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period, the natural gas fired boiler certification does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1); and

If the fuel supplier certification is used to demonstrate compliance the following, as a minimum, shall be maintained:

- (4) Fuel supplier certifications.
- (5) The name of the fuel supplier; and
- (6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.

The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.

- (c) To document compliance with Condition D.1.11, the Permittee shall maintain records of visible emission notations of the hot mix asphalt facility stack exhaust.
- (d) To document compliance with Condition D.1.12, the Permittee shall maintain the following:
 - (1) Weekly records of the following operational parameters during normal operation when venting to the atmosphere:
 - (A) Pressure drop across the scrubber;
 - (B) Scrubbant and blow-down flow rate.
- (e) To document compliance with Condition D.1.13, the Permittee shall maintain records of the results of the inspections required under Condition D.1.13 and the dates the vents are redirected.
- (f) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

D.1.15 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.6 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Floyd Crim & Sons, Inc. 31 of 38 Manilla, Indiana 145-14503-00010

Permit Reviewer: ERG/AR

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CERTIFICATION

Source Name: Floyd Crim & Sons, Inc.

Source Address: 3713 North 775 East, Manilla, IN 46150 Mailing Address: 3713 North 775 East, Manilla, IN 46150

FESOP No.: F145-14503-00010

	This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.
	Please check what document is being certified:
9	Annual Compliance Certification Letter
9	Test Result (specify)
9	Report (specify)
9	Notification (specify)
9	Affidavit (specify)
9	Other (specify)
	tify that, based on information and belief formed after reasonable inquiry, the statements and information ne document are true, accurate, and complete.
Sigr	nature:
Prin	ted Name:
Title	Position:
Date	e:

Floyd Crim & Sons, Inc. Manilla, Indiana

Permit Reviewer: ERG/AR

32 of 38 145-14503-00010

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

Single Liquid Binder Solvent Quarterly Report

Source Address: 3713 North 775 East, Manilla, IN 46150 Mailing Address: 3713 North 775 East, Manilla, IN 46150

FESOP No.: F145-14503-00010 Facility: Asphalt Plant

Parameter: VOC

YEAR:

Limit: Cutback asphalt rapid cure liquid binder usage shall not exceed 98.8 tons of VOC

solvent per twelve (12) consecutive month period rolled on a monthly basis. Cutback asphalt medium cure liquid binder usage shall not exceed 134.4 tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis. Cutback asphalt slow cure liquid binder usage shall not exceed 375.4 tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis. Emulsified asphalt with solvent liquid binder usage shall not exceed 201.6 tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis. Other asphalt with solvent liquid binder shall not exceed 3,754.4 tons of VOC solvent per twelve (12) consecutive

binder shall not exceed 3,754.4 tons of VOC solvent per twelve (12) cons

month period rolled on a monthly basis.

12 month perio	od: Limit app	the only liquid binder solvent blicable: of the "Multiple Liquid Binder So	•
	Column 1	Column 2	Column 1 + Column 2
Month	This Month (tons)	Previous 11 Months (tons)	12 Month Total (tons)
Month 1			
Month 2			
Month 3			
9 9	No deviation occurred in this Deviation/s occurred in this Deviation has been rer		
Submitted by: Title / Position: Signature: Phone:		Date	<u></u>

Attach a signed certification to complete this report.

Floyd Crim & Sons, Inc. Manilla, Indiana

Permit Reviewer: ERG/AR

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

Multiple Liquid Binder Solvent Quarterly Report

Source Name: Floyd Crim & Sons, Inc.

Source Address: 3713 North 775 East, Manilla, IN 46150 Mailing Address: 3713 North 775 East, Manilla, IN 46150

FESOP No.: F145-14503-00010 Facility: Asphalt Plant

Parameter: VOC

Limit:: 98.8 tons per year

Year:

Month	Type of Liquid binder	Solvent Usage This Month (tons)	Divisor	VOC emitted This Month (tons) for each solvent	VOC emitted This Month (tons)	VOC emitted Previous 11 Months (tons)	This month + Previous 11months =VOC emitted 12 Month Total (tons)
Month 1	Cutback asphalt rapid cure		1				
	Cutback asphalt medium cure		1.36				
	Cutback asphalt slow cure		3.8				
	Emulsified asphalt		2.04				
	other asphalt		38				
Month 2	Cutback asphalt rapid cure		1				
	Cutback asphalt medium cure		1.36				
	Cutback asphalt slow cure		3.8				
	Emulsified asphalt		2.04				
	other asphalt		38				
Month 3	Cutback asphalt rapid cure		1				
	Cutback asphalt medium cure		1.36				
	Cutback asphalt slow cure		3.8				
	Emulsified asphalt		2.04				
	other asphalt		38				

9	No deviation occurred in this reporting period.
9	Deviation/s occurred in this reporting period.

Deviation has been reported	
Submitted by:	Date:
Title / Position:	Phone:
Signature:	
Attach a sig	ned certification to complete this report.

Floyd Crim & Sons, Inc. 34 of 38 Manilla, Indiana 145-14503-00010

Permit Reviewer: ERG/AR

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

COMPLIANCE BRANCH P.O. Box 6015 100 North Senate Avenue Indianapolis, Indiana 46206-6015 Phone: 317-233-5674 Fax: 317-233-5967

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) **EMERGENCY OCCURRENCE REPORT**

Source Name: Floyd Crim & Sons, Inc.

Source Address: 3713 North 775 East, Manilla, IN 46150 3713 North 775 East, Manilla, IN 46150 Mailing Address:

FESOP No.: F145-14503-00010

This form consists of 2	pages
-------------------------	-------

Page 1 of 2

9 This is an emergency as defined in 326 IAC 2-7-1(12)

- The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
- The Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A

f any of the following are not applicable, mark N/A	Page 2 of 2
Date/Time Emergency started:	
Date/Time Emergency was corrected:	
Was the facility being properly operated at the time of the emergency? Y Describe:	N
Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _x , CO, Pb, other:	
Estimated amount of pollutant(s) emitted during emergency:	
Describe the steps taken to mitigate the problem:	
Describe the corrective actions/response steps taken:	
Describe the measures taken to minimize emissions:	
If applicable, describe the reasons why continued operation of the facilities are necessimminent injury to persons, severe damage to equipment, substantial loss of capital of product or raw materials of substantial economic value:	
Form Completed by: Title / Position: Date: Phone:	

A certification is not required for this report.

Floyd Crim & Sons, Inc. Manilla, Indiana

36 of 38 145-14503-00010 Permit Reviewer: ERG/AR

Floyd Crim & Sons, Inc. Manilla, Indiana

Permit Reviewer: ERG/AR

37 of 38 145-14503-00010

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Floyd Crim & Sons, Inc. Source Address: 3713 North 775 East, Manilla, IN 46150 Mailing Address: 3713 North 775 East, Manilla, IN 46150 FESOP No.: F145-14503-00010 Months: _____ to _____ Year: _____ Page 1 of 2 This report is an affirmation that the source has met all the requirements stated in this permit. This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period". 9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD. 9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD **Permit Requirement** (specify permit condition #) Date of Deviation: **Duration of Deviation: Number of Deviations: Probable Cause of Deviation:** Response Steps Taken: **Permit Requirement** (specify permit condition #) Date of Deviation: **Duration of Deviation:** Number of Deviations: **Probable Cause of Deviation:** Response Steps Taken:

Floyd Crim & Sons, Inc. Manilla, Indiana Permit Reviewer: ERG/AR

38 of 38 145-14503-00010

	Page 2 of a
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Form Completed By:	
Title/Position:	
Date:	
Phone:	

Attach a signed certification to complete this report.

June 19, 2002

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Federally Enforceable State Operating Permit (FESOP) Renewal

Source Background and Description

Source Name: Floyd Crim & Sons, Inc. **Source Location:** 3713 North 775 East

County: Shelby SIC Code: 2951

Operation Permit No.: F145-14503-00010

Permit Reviewer: ERG/AR

The Office of Air Quality (OAQ) has reviewed a FESOP renewal application from Floyd Crim & Sons, Inc. relating to the operation of a stationary hot drum-mix asphalt plant. Floyd Crim & Sons, Inc. was issued FESOP F145-14503-00010 on January 7, 1997.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission unit and pollution control device:

One (1) aggregate dryer/mixer with a maximum capacity of 110 tons per hour, having a burner with a maximum heat input rate of 37 million British thermal units per hour, exhausting through a venturi scrubber at stack C-3. The burner is fired by #2 distillate fuel oil. This unit was constructed in March 1994.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

New Emission Units and Pollution Control Equipment Receiving New Source Review Approval

There are no new emission units and pollution control equipment receiving new source review approval at this source during this review process.

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

(a) Space heaters, process heaters, heat treat furnaces, or boilers using the following fuel: Fuel oil-fired combustion sources with heat input equal to or less than two million (2,000,000) Btu per hour and firing fuel containing less than five-tenths (0.5) percent sulfur by weight.

Floyd Crim & Sons, Inc.

Page 2 of 8
Manilla. Indiana

145-14503-00010

Permit Reviewer: ERG/AR

(1) One (1) hot oil heater with a maximum heat input rate of 1.0 million British thermal units per hour, fired only by #2 distillate fuel oil containing less than 0.49 percent sulfur by weight. This unit was constructed in 1985.

- (b) Paved and unpaved roads and parking lots with public access.
 - (1) Paved roads.
- (c) Emission units with PM and PM10 emissions less than five (5) tons per year, SO₂, NOx, and VOC emissions less than ten (10) tons per year, CO emissions less than twenty-five (25) tons per year, lead emissions less than two-tenths (0.2) tons per year, single HAP emissions less than one (1) ton per year, and combination of HAPs emissions less than two and a half (2.5) tons per year:
 - (1) One (1) material conveying and handling operation.
 - (2) Two (2) asphalt storage tanks with capacities equal to 10,000 gallons.
 - (3) One (1) #2 fuel oil storage tank with a capacity of 10,000 gallons.
 - (4) Sand and limestone stockpiles with a total capacity of 1,000 tons.

Existing Approvals

(a) FESOP 145-5584-00010, issued on January 7, 1997; and expires on January 7, 2002, and

All conditions from previous approvals were incorporated into this FESOP except the following:

Condition D.2.7, Daily Visible Emissions Notations, was changed from daily visible emission notation of the aggregate dryer/mix stack exhaust to once per shift visible emission notations to ensure compliance with 326 IAC 5 and 326 IAC 6.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the FESOP Renewal be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete FESOP Renewal application for the purposes of this review was received on June 18, 2001.

There was no notice of completeness letter mailed to the source.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (pages 1 through 6).

Tellill Neviewel. LNO/AIN

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source, excluding the emission limits that were contained in the previous FESOP.

Pollutant	Unrestricted Potential Emissions (tons/yr)
PM	13,491.4
PM-10	3,132.1
SO ₂	83.2
VOC	>100*
СО	6.0
NO _x	28.6

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

*The VOC potential emissions include the maximum potential use of cold mix cutback asphalt.

HAP's	Unrestricted Potential Emissions (tons/yr)
Formaldehyde	1.5
TOTAL	2.5

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM10 is equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) Fugitive Emissions Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there is an applicable New Source Performance Standards that was in effect on August 7, 1980, the fugitive emissions are counted toward determination of PSD and Emission Offset applicability.

Potential to Emit After Issuance

The source, issued a FESOP on January 7, 1997, has opted to remain a FESOP source, rather than apply for a Part 70 Operating Permit. The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any control equipment is considered enforceable only after issuance of this Federally Enforceable State Operating Permit and only to the extent that the effect of the control equipment is made practically enforceable in the permit. Since the source has not constructed any new emission units, the source's potential to emit is based on the emission units included in the original FESOP. (F145-5584-00010; issued on January 7, 1997).

Page 4 of 8 145-14503-00010

	Potential to Emit After Issuance (tons/year)						
Process/emission unit	PM	PM-10	SO ₂	VOC	CO	NO _X	HAPs
Batch Mixer and Dryer	Less than 23.1	Less than 23.1	81	0.2	5.8	27.8	2.5
Storage					1	_	_
Conveying	1.3	0.1	_	_	_	_	_
Insignificant Heater	0.1	_	2.2	_	0.2	0.8	_
Cold Mix Cutback Asphalt	1			Less than 98.8			_
Total PTE After Issuance	Less than 24.41	Less than 23.2	83.2	Less than 99	6.0	28.6	2.5

County Attainment Status

The source is located in Shelby County.

Pollutant	Status
PM-10	Attainment
SO ₂	Attainment
NO_2	Attainment
Ozone	Attainment
CO	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Shelby County has been designated as attainment or unclassifiable for ozone.
- (b) Shelby County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirement f or Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Federal Rule Applicability

- (a) The storage tanks are not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60, Subpart Kb), because all of these tanks have a capacity of less than 10,567 gallons (40 cubic meters).
- (b) The asphalt plant is subject to the New Source Performance Standard, 326 IAC 12, (40 CFR 60, Subpart I), because it was constructed in March of 1994 after June 11, 1973, the applicability date for this rule. There have been no modifications or reconstruction of equipment since this time. Pursuant to 40 CFR Subpart I, the particulate matter emissions from the asphalt plant shall not exceed 0.04 grains per dry standard cubic foot and the visible emissions from the asphalt plant shall not exceed 20 percent opacity.
- (c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14 and 40 CFR Part 63) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 2-8-4 (FESOP)

- (a) Pursuant to 326 IAC 2-8-4, the emissions of PM-10 from the aggregate dryer/mixer shall be limited to 0.048 pounds of PM-10 per ton of asphalt produced. This is equivalent to PM-10 emissions of less than 23.1 tons per year. Use of the scrubber will ensure compliance with this limit. The PM-10 emissions for the whole source are therefore limited to less than 100 tons per year. Compliance with this limit makes 326 IAC 2-7 (Part 70 Permit Program), 326 IAC 2-2 (PSD) and 40 CFR 52.21 not applicable and ensures compliance with New Source Performance Standards, 326 IAC 12 (40 CFR 60.90 to 60 .93, Subpart I).
- (b) Pursuant to 326 IAC 2-8-4, the liquid binder used in cold mix asphalt production shall be limited as follows:
 - (1) Cutback asphalt rapid cure liquid binder usage shall not exceed 98.8 tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis.
 - (2) Cutback asphalt medium cure liquid binder usage shall not exceed 134.4 tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis.
 - (3) Cutback asphalt slow cure liquid binder usage shall not exceed 375.4 tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis.
 - (4) Emulsified asphalt with solvent liquid binder usage shall not exceed 201.6 tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis.
 - (5) Other asphalt with solvent liquid binder shall not exceed 3,754.4 tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis.
 - (6) The VOC solvent allotments in (1) through (5) above shall be adjusted when more than one type of binder is used per twelve (12) month consecutive period rolled on a monthly basis. In order to determine the tons of VOC emitted per each type of binder, use the following formula and divide the tons of VOC solvent used for each type of binder by the corresponding adjustment ratio listed in the table that follows.

<u>Tons of solvent contained in binder</u> = tons of VOC emitted Adjustment ratio

Type of binder	Tons VOC Solvent	Adjustment Ratio	Tons VOC Emitted
Cutback Asphalt Rapid Cure		1	
Cutback Asphalt Medium Cure		1.36	
Cutback Asphalt Slow Cure		3.8	
Emulsified Asphalt		2.04	

Floyd Crim & Sons, Inc.

Page 6 of 8

Manilla. Indiana

145-14503-00010

Permit Reviewer: ERG/AR

The equivalent total tons of VOC of the combined liquid binders shall be less than 98.8 tons per twelve consecutive month period rolled on a monthly basis.

326 IAC 2-2 (Prevention of Significant Deterioration)

The emissions of PM from the aggregate dryer/mixer shall be limited to 0.045 pounds of PM per ton of asphalt produced. This is equivalent to PM emissions of less than 23.1 tons per year. The PM emissions for the whole source will be less than 24.4 tons per year. Compliance with this limit will make the source a minor source under PSD and will ensure compliance with New Source Performance Standards, 326 IAC 12 (40 CFR 60.90 to 60 .93, Subpart I). Use of the scrubber will ensure compliance with this limit.

326 IAC 6-4 (Fugitive Dust Emissions)

Pursuant to 326 IAC 6-4, the source shall not generate fugitive dust to the extent that some portion of the material escapes beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located.

326 IAC 6-5 (Fugitive Particulate Emission Limitations)

This rule requires a fugitive dust plant to be submitted. The plan was submitted, reviewed, and approved. The source shall comply with dust abatement measures contained therein.

326 IAC 2-6 (Emission Reporting)

This source is located in Shelby County and the potential to emit all criteria pollutants is less than one hundred (100) tons per year. Therefore, 326 IAC 2-6 does not apply.

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 6-3 (Process Operations)

Pursuant to 326 IAC 6-3-1(b)(2), since the asphalt plant is subject to NSPS 40 CFR 60, Subpart I it is not subject to 326 IAC 6-3 (Process Operations).

326 IAC 8-5-2 (Miscellaneous Operations: Asphalt Paving)

Pursuant to 326 IAC 8-5-2, no person shall cause or allow the use of cutback asphalt or asphalt emulsion containing more than 7 percent oil distillate by volume of emulsion of any paving application except:

- (a) Penetrating prime coating;
- (b) Stockpile storage; and

Floyd Crim & Sons, Inc.

Page 7 of 8

Manilla. Indiana

145-14503-00010

Permit Reviewer: ERG/AR

(c) Application during the months of November, December, January, February, and March.

This rule applies because the aggregate dryer/mixer was constructed in 1994, which is after January 1, 1980, the applicability date for this rule.

326 IAC 7-1.1-2 (Sulfur Dioxide (SO2) Emission Limitations)

Pursuant to 326 IAC 7-1.1-2, the SO2 emissions from the aggregate dryer/mixer shall not exceed five tenths (0.5) pounds per MMBtu heat input. This is equivalent to 0.5% sulfur in the fuel oil.

326 IAC 8-9 (Volatile Organic Liquid Storage Vessels)

326 IAC 8-9 (Volatile Organic Liquid Storage Vessels) does not apply to this source because this source is located in Shelby County and this rule applies to sources located in Clark, Floyd, Lake, or Porter County.

Testing Requirements

The Permittee shall perform PM-10 testing utilizing methods as approved by the Commissioner to document compliance with 326 IAC 2-8-4 and New Source Performance Standards, 326 IAC 12 (40 CFR 60.90 to 60 .93, Subpart I). This test shall be repeated at least once every five years from the date of the last valid compliance demonstration. PM-10 includes filterable and condensible PM-10.

Compliance Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

All compliance requirements from previous approvals were incorporated into this FESOP. The compliance monitoring requirements applicable to this source are as follows:

- 1. The aggregate dryer/mixer has applicable compliance monitoring conditions as specified below:
 - (a) Visible emissions notations of the aggregate dryer/mixer stack exhaust shall be performed once per shift during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to

Page 8 of 8 145-14503-00010

Floyd Crim & Sons, Inc. Manilla, Indiana Permit Reviewer: ERG/AR

cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

(b) The Permittee shall record the scrubber flow rate and pressure drop across the scrubber used in conjunction with the aggregate dryer/mixer, at least once per shift when the aggregate dryer/mixer is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the scrubber flow rate and pressure drop across the scrubber shall be maintained within the range established during the latest stack test.

These monitoring conditions are necessary because the scrubber for the aggregate dryer/mixer must operate properly to ensure compliance with 326 IAC 2-8 (FESOP).

Conclusion

The operation of this stationary hot drum-mix asphalt plant shall be subject to the conditions of the attached proposed FESOP No.: F145-14503-00010.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
#2 Fuel Oil Heater

Company Name: Floyd Crim & Sons, Inc.

Address City IN Zip: 3713 North 775 East, Manilla, IN, 46150

CP: 145-14503-00010

Plt ID: 145-00010
Reviewer: ERG/AR

Date: October 24, 2001

Heat Input Capacity

MMBtu/hr

Potential Throughput

kgals/year

S = Weight % Sulfur

0.49

1.0

			Pollutant			
	PM*	PM10	SO2	NO_x	VOC	CO
Emission Factor in lb/kgal	2.0	1.0	70.0	24.0	0.2	5.0
			(142.0 S)			
Potential Emission in tons/yr	0.1	0.0	2.2	0.8	0.0	0.2

^{*}PM emission factor is filterable PM only. Condensable PM emission factor is 1.3 lb/kgal.

The emissions of PM and PM10 from the Rotary Dryer are estimated using the AP-42 Chapter 11.1 emission factors for asphalt plants, and are shown on page 3. The emissions of SO2, NOx, VOC and CO are estimated using the boiler emission factors from AP-42 Chapter 1.4, as shown above. These boiler emission factors are being used for these pollutants based on IDEM guidance.

62.6

Methodology

1 gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 kgal/1,000 gal x 1 gal/0.140 MMBtu

Emission Factors are from AP-42, Tables 1.3-1, 1.3-2, and 1.3-3 (SCC 1-02-005-01/02/03) Supplement E 9/98 Emission (tons/yr) = Throughput (kgals/yr) x Emission Factor (lb/kgal)/2,000 lb/ton

Appendix A: Emissions Calculations Natural Gas Combustion Only MM BTU/HR <100

#2 Fuel Hot Oil Mixer/Dryer Burner

Company Name: Floyd Crim & Sons, Inc.

Address City IN Zip: 3713 North 775 East, Manilla, IN, 46150

CP: 145-14503-00010

Plt ID: 145-00010
Reviewer: ERG/AR

Date: October 24, 2001

Heat Input Capacity

MMBtu/hr

Potential Throughput

kgals/year

S = Weight % Sulfur

0.49

37.0 2315.1

	Pollutant			
	SO2	NO_x	VOC	CO
Emission Factor in lb/kgal	70.0 (142.0 S)	24.0	0.2	5.0
Potential Emission in tons/yr	81.0	27.8	0.2	5.8

^{*}PM emission factor is filterable PM only. Condensable PM emission factor is 1.3 lb/kgal.

The emissions of PM and PM10 from the Drum Dryer are estimated using the AP-42 Chapter 11.1 emission factors for asphalt plants, and are shown on page 3. The emissions of SO2, NOx, VOC and CO are estimated using the boiler emission factors from AP-42 Chapter 1.4, as shown above. These boiler emission factors are being used for these pollutants based on IDEM guidance.

Methodology

1 gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 kgal/1,000 gal x 1 gal/0.140 MMBtu

Emission Factors are from AP-42, Tables 1.3-1, 1.3-2, and 1.3-3 (SCC 1-02-005-01/02/03) Supplement E 9/98 Emission (tons/yr) = Throughput (kgals/yr) x Emission Factor (lb/kgal)/2,000 lb/ton

Appendix A: Emission Calculations

Emission Calculations

Drum Mix Plant: Drum Dryer, #2 Oil-Fired Company Name: Floyd Crim & Sons, Inc.

Address City IN Zip: 3713 North 775 East, Manilla, IN, 46150

CP: 145-14503-00010 Plt ID: 145-00010 Reviewer: ERG/AR Date: October 24, 2001

Maximun	n Capacity
110	tons/hr

	Uncontrolled Emission Factors
PM	28 lbs/ton
PM-10	6.5 lbs/ton
Total HAPs	0.0051 lbs/ton

	Controlled Emission Factors
PM	0.048 lbs/ton
PM-10	0.048 lbs/ton
Total HAPs	0.0051 lbs/ton

See page 2 of the appendix for emission estimates for the other pollutants of combustion from the drum dryer.

Uncontrolled	PM	PM-10	HAPs	
Emissions (tons/yr)	13490	3132	2.5	

Controlled	PM	PM-10	HAPs	
Emissions (tons/yr)	23.1	23.1	2.5	

Methodology: (Maximum capacity)*(8760 hr/yr)*(emission factor)*(1 ton/2000 lbs)

^{*} Emission factors for drum dryers controlled with a venturi scrubber from AP-42 Chapter 11.1, Table 11.1-3 are 0.045 lb/ton for PM-10 and PM. The HAP emission factors are from Table 11.1-10, formaldehyde is the largest HAP.

Appendix A: Emission Calculations Page 4 of 6 TSD App A Potential to Emit Calculations for Storage Piles Company Name: Floyd Crim & Sons, Inc. Address City IN Zip: 3713 North 775 East, Manilla, IN, 46150 CP: 145-14503-00010 Plt ID: 145-00010 Reviewer: ERG/AR Date: October 24, 2001 Ef = 1.7*(s/1.5)*(365-p)where: 235*(f/15) 1.27 % silt for sand s = 1.5 % silt for stone s = 1 % silt for slag s = 1 % silt for gravel s = 0.8 % silt for RAP s = 125 days of rain greater than or equal to 0.01 inches p =f = 15 % of wind greater than or equal to 12 mph Ef = 1.47 lb/acre/day for sand Ef = 1.74 lb/acre/day for stone Ef = 1.16 lb/acre/day for slag 1.16 lb/acre/day for gravel Ef = Ef = 0.93 lb/acre/day for RAP Ep (storage) = Ef*sc*(20cuft/ton)*(365 day/yr)(2000 lb/ton)*(43560 sqft/acre)*(25 ft) 500 tons storage capacity for sand sc = sc = 500 tons storage capacity for stone 0 tons storage capacity for slag sc = 0 tons storage capacity for gravel sc = 0 tons storage capacity for RAP sc = Ep = 0.00 tons/yr for sand 0.00 tons/yr for stone Ep =Ep =0.00 tons/yr for slag 0.00 tons/yr for gravel Ep = 0.00 tons/yr for RAP Ep = Ep Total = 0.01 tons/yr of PM

PM-10 = 35% of PM:

Ep =0.0009 tons/yr for sand Ep = 0.0010 tons/yr for stone Ep =0.0000 tons/yr for slag 0.0000 tons/yr for gravel Ep =0.0000 tons/yr for RAP

Ep =0.0019 tons/yr of PM-10 Ep Total =

50% is emitted after controls PM = 0.00 tons/yr PM-10 = 0.00 tons/yr **Appendix A: Emission Calculations**

Page 5 of 6 TSD App A

Potential to Emit Calculations for Conveying and Handling

Company Name: Floyd Crim & Sons, Inc.

Address City IN Zip: 3713 North 775 East, Manilla, IN, 46150

CP: 145-14503-00010 Plt ID: 145-00010 Reviewer: ERG/AR Date: October 24, 2001

Handle: 110 tons/hr

Ef =
$$.0032 * (U/5)^{1.3} * k$$
 where: $(M/2)^{1.4}$

k = 1 1 (particle size multipler)

M = 5 % moisture

U = 12 mph mean wind speed (worst case)

Ef = 0.0028 lb/ton

PM = 1.33 tons/yr PM-10 = 0.13 tons/yr

Methodology:

Use the above equation to determine the emission factor (Ef).

Then, (Ef)*(142.5 tons/yr)*(8760 hr/yr)*(1 ton/2000 lbs)

The emission factor equation was taken from AP-42, Chapter 13.2.4.

Appendix A: Emission Calculations

Company Name: Floyd Crim & Sons, Inc.

Address City IN Zip: 3713 North 775 East, Manilla, IN, 46150

CP: 145-14503-00010 Plt ID: 145-00010 Reviewer: ERG/AR Date: October 24, 2001

Summary

Uncontrolled Emissions in tons/year

	PM	PM-10	SO2	Nox	VOC	СО	HAPs
Batch Mixer and Dryer	13490	3132	81.0	27.8	0.2	5.8	2.5
#2 Hot Oil Heater	0.1		2.2	0.8		0.2	
Storage	0.01	0.002					
Conveying	1.3	0.1					
Total =	13491.4	3132.1	83.2	28.6	0.2	6.0	2.5

Page 6 of 6 TSD App A

Controlled Emissions in tons/year

	PM	PM-10	SO2	Nox	VOC	CO	HAPs
Batch Mixer and Dryer	23.1	23.1	81	27.8	0.2	5.8	2.5
#2 Hot Oil Heater	0.1		2.2	0.8		0.2	
Storage							
Conveying	1.3	0.1					
Total =	24.5	23.2	83.2	28.6	0.2	6.0	2.5

40 CFR 60 Subpart I limits the particulate matter emissions from the entire source to 0.04 dscf/min. This is equivalent to 5.3 pounds per hour or 23.1 tons per year.

Methodology: $(0.04 \text{ gr/dscfm})^*(15,383 \text{ dscfm})^*(60 \text{ min/hr})^*(8760 \text{ hr/yr})^*(1 \text{ lb/}7000 \text{ gr})^*(1 \text{ ton/}2000 \text{ lb}) = 23.1 \text{ tpy}$